

Sewer Gas, Trap Seals, and Drains Fact Sheet

Facts About Sewer Gas, Trap Seals, And Drains

Sewer Gas

The main component of sewer gas that causes its bad odor is Hydrogen Sulfide. Hydrogen Sulfide gas is heavier than air.

1. Sewer gas DOES NOT rise up out of drain pipes and through small openings in trap seal devices like steam.

Hydrogen Sulfide gas collects under a layer of air. An outer force is needed to move the lower layer of gas and mix it with the upper layer of air. The only way sewer gas is expelled out of a drain is if it is pushed out by an atmospheric pressure differential and/or turbulence.

- Wind blowing into a vent stack pipe can cause a higher pressure in the drain than in the room, pushing sewer gas out of the floor drain and mixing it with the room air.
- A ceiling fan or air conditioner can pull air from a room, reducing the room air pressure and allowing sewer gas to be pulled out from a floor drain.
- Sewer gasses can form inside of a septic tank, increasing the pressure inside of the tank and expelling gas up and out of a floor drain.
- Water backup from flooding can push sewer gas up and out of a floor drain.

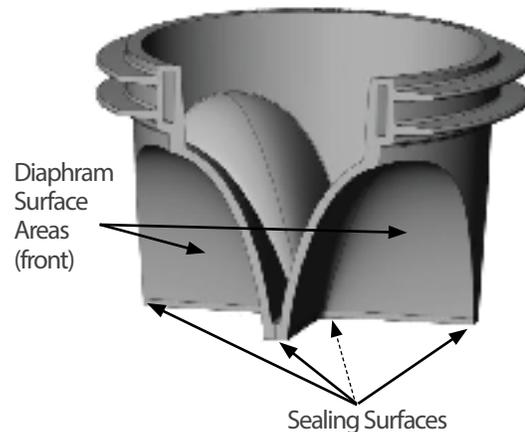
2. If you can see light through a trap-sealing device that DOES NOT means that sewer gas is escaping.

- The fact that light can or cannot be seen through a Trap Seal has nothing to do with whether or not the device will stop sewer gases. As stated above, the only way sewer gas is expelled out of drains is if it is pushed out by an atmospheric pressure differential and/or turbulence.

3. A metal drain snake will eventually destroy the rubber parts of a Trap Seal.

- Use a hook to remove the Trap Seal before using a metal drain snake.

Trap Seal



Jones Stephens' trap seals will close between 0.004 and 0.007 pounds per square inch of pressure and remain closed to over 10.00" of head pressure. When reverse pressure occurs, the trap seal will open and allow air and/or water to enter the drain.

The trap seal is a pressure amplifier like a diaphragm-type valve. The ultra-low pressure from the diaphragm surface area below the device concentrates pressure at the sealing surfaces of the trap seal, closing the device.

4. A Trap Seal CANNOT be used in place of a P-Trap.

- A Trap Seal does not provide water to a drain but will greatly reduce the amount of water needing to be replaced in a P-Trap by reducing evaporation. Water will still need to be replaced in the P-Trap, manually or with a trap primer.

5. The ASSE-1072 Standard was written for the reduction of evaporation of water from a P-Trap.

- The Jones Stephen' Trap Seal exceeds the ASSE-1072 requirement of evaporation reduction and the ASSE-1072 requirement of 10.00" of head pressure to prevent backflow.